EMSC/CHILD READY CONNECTION Newsletter

DECEMBER VOLUME 1, ISSUE 9

EMS & Trauma Section
EMS for Children,
PO Box 202951,
1400 Broadway,
Room C314A,
Helena MT 59620

WHAT'S NEW?	PAGE

A word from the EMSC Program Manager:

Greetings!

The Emergency Medical Services for Children (EMSC) Program aims to ensure that emergency medical care for the ill and injured child or adolescent is well integrated into an emergency medical service system.

We work to ensure that the system is backed by optimal resources and that the entire spectrum of emergency services (*prevention, emergency response, prehospital care, hospital care, interfacility transport, and rehabilitation)* is provided to children and adolescents, no matter where they live, attend school or travel.

THE RIGHT CARE AT THE RIGHT PLACE AT THE RIGHT TIME
WITH THE RIGHT RESOURCES!

Exciting news and events are going on this month.

SEE WHAT'S NEW!

THE 2013 EMSC PREHOSPITAL ASSESSMENT IS STILL OPEN FOR THE WEB-BASED SURVEY.

MONTANA'S RESPONSE RATE IS: 56.7% WE NEED AT LEAST AN 80% RESPONSE RATE!

If your facility does not respond to 911 calls, you are finished on the first page!

If your facility does not transport, you are finished on the 4th page with an option to give more information to help us become a state where hospitals and prehospital services are PEDIATRIAC READY!

You have the option to use the secure web-based system at **emscsurveys.org** or completing the hard copy and mailing it to Robin Suzor, PO BOX 202951, Helena, MT 59620.

WHAT ARE EARLY RESULTS OF THE PREHOSPITAL EMSC ASSESSMENT?

Always or Almost Always– On-line Medical Direction was available!!

Missing Equipment includes but not limited to:

Broselow Tapes	*Thermal blanket or heat-reflective material*
End tidal CO2 detection capability for pediatric patients	*Nasal Airway–sizes-16fr, 18fr, 20fr, 22fr, or 24fr (internal diameters 3.5mm-6.0mm)*
Suction catheter sizes 6fr, 8fr, or 10 fr	*Small extremity immobilization device*
Neonate and infant size mask for a bag-valve mask	*Child-sized Nasal Cannula*
Size 0 Miller Laryngoscope blade	*Medium rigid cervical Immobilization Device*
Child sized lower extremity (femur) traction device	*Pulse Oximeter with pediatric probes*

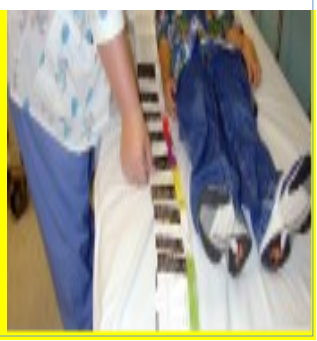
Majority are **NOT Aware** of the "***Working Group Best-Practice Recommendations for the Safe Transportation of Children in Emergency Ground Ambulances"***

Written protocols or guidelines ARE NOT ALWAYS physically available in the EMS vehicle to providers for the treatment of pediatric patients

Majority are not Approved Car Seat Inspection Stations.

REMEMBER: A free online training is available on how to use the BroselowTM Pediatric Tape Ambulance Services that have at least half of the EMS staff complete the online BroselowTM Tape Training are eligible to receive **FREE Pediatric Emergency Tapes** for each transporting ambulance with a limit of 5 tapes for each service.

http://www.dphhs.mt.gov/ems/resources/misc/Broselow.pdf



PRE-HOSPITAL SERVICES WHO *HAVE RESPONDED* TO THE EMSC SURVEY:

Victor Volunteer Rural Fire Dpt; **Blaine CO AMB II**; Richland CO AMB; **Livingston Fire Rescue**; Missoula City Fire Dpt; **Stat AMB**; Treasure CO AMB; **Molt Volunteer Fire Dpt**; Petroleum CO AMB Srvc; **Thompson Falls AMB**; Hill CO AMB Srvc of Rudyard; **Big Sky Fire Dpt**; Dahl Memorial Healthcare AMB; **NE MT Health Srvc**; Broadwater Health Center; **Big Horn CO AMB**; Daniels CO AMB Srvc; **Custer Volunteer Fire**; Big Horn AMB; **Dixon Rural Fire**; Baxendale QRU; **Choteau CO QRU**; Darby QRU; **Sweet Grass CO**; Three Forks Area AMB Srvc; **Plains Community AMB**; Birdseye QRU; **St. Patrick's Hospital AMB**; Blaine CO AMB III; **Belt Volunteer AMB**; Sheridan Memorial Hospital EMS; **Alder EMS**; Red Lodge Fire EMS; **Ennis AMB Srvc**; Beaverhead EMS; **Missoula Rural Fire Dpt;** Frenchtown Rural Fire District; **Bigfork Fire District**; Lincoln Volunteer AMB Service; **Northern Cheyenne AMB Srvc**; Kalispell Fire AMB Dpt; **Worden Fire Dpt & AMB**; Toole CO AMB; **Glacier CO EMS**; Helena Fire Dpt; **Seeley Lake QRU Rural Fire Dpt**; Amsterdam Volunteer Fire Co; Libby **Volunteer AMB**; City of Havre AMB & Fire Dpt; **Stevensville City & Rural Fire Dpt**; Bigfork Volunteer AMB; **Avon Volunteer Fire Dpt;** Painted Rock Fire & Rescue; **Central Valley Fire District-Belgrade City Fire Dpt**; Marcus Daly Memorial Hospital AMB Service; **City of Bozeman Fire Dpt**; St. Peter's Hospital AMB; **Gallatin River Ranch Fire Rescue;** Badrock Volunteer QRU; **Great Falls Emergency Srvcs**; Lakeside QRU; **Bluecreek Volunteer Fire Dpt**; Eagle Emergency Srvc; **Cascade CO QRU**; Clarks Fork Valley AMB; **Columbus Rural Fire District #3**; Willow Creek Rural Fire Dpt; **Colstrip AMB Srvc;** Corvallis QRU; **Blaine CO AMB I;** Georgetown Lake Fire Dpt; **Melstone QRU;** Wolf Creek Volunteer Fire Dpt; **Manhattan Volunteer Fire Dpt;** Jesse AMB Srvc; **Phillips CO AMB;** Wisdom Volunteer AMB Srvc; **Laurel Volunteer AMB Srvc;** Park City Volunteer AMB Srvc; **Billings Fire Dpt;** Three Rivers EMS; **Great Falls Fire Rescue;** Glacier CO EMS AMB; **Boulder AMB Srvc;** Harrison QRU; **Tri-Lakes Volunteer Fire Dpt;** Missoula EMS; **American Medical Response-Billings**; Wibaux CO AMB Srvc; **Memorial AMB of Fort Benton;** Joliet EMS; **Golden Valley QR AMB;** Polson AMB; **Ronan AMB;** Drummond Volunteer AMB; **Eureka Volunteer AMB Srvc;** Hawk Creek QRU; **Florence Volunteer Fire;** Butte-Silver Bow Fire Dpt; **American Medical Response-Bozeman;** Hot Spring Community AMB Srvc; **Montana City Volunteer Fire Dpt;** Roosevelt Memorial Medical Center AMB; **Elliston EMS;** Prairie CO Amb Srvc; **Canyon Creek QRU;** West Fork QRU; **St. Peters Hospital Amb;** Liberty CO Amb; **Cooke City EMS;** American Medical Response-Bozeman; **Big Mountain Fire & Rescue;** Butte-Silverbow Fire Dpt; **Elliston EMS;** Hawk Creek QRU; **Hot Springs Community Ambulance Service Inc;** Hot Springs Fire Dpt Amb; **Montana City Volunteer Fire Dpt;** Roosevelt Memorial Medical Center Amb; **West Fork QRU**; Whitefish Volunteer Fire Dpt; **Wise River Volunteer Fire Co**

THANK YOU!

AMB= Ambulance; DPT = Department;

CHILD READY MONTANA NEWS

The State Partnership Regionalization of Care Grant (SPROC), is funded by the Health Resource and Services Administration (HRSA.)

The intent of the **Child Ready Montana Program** is to shape a regional care plan for pediatric patients in Montana. Hospitals will be recommended to stock pediatric equipment, certify staff in Pediatric advanced life support (PALS) and Emergency Nursing Pediatric Course (ENPC), education, and updated transfer policies. Montana is one of the 6 states in the Nation to be awarded this grant. This grant works collaboratively with the Montana Emergency Medical Services for Children Program (EMSC.)

ROSEBUD HEALTH CARE CENTER RECEIVES NEW PEDIATRIC EQUIPMENT FROM 'CHILD READY MONTANA' PROGRAM

Forsyth, Mont. ***(November 6, 2013)*** – With a goal to make sure pediatric patients in Montana receive the right care at the right time and in the right place, **the Child Ready Montana Program** is working to develop a model of care that ensures children are not mismanaged due to inadequate equipment or training during transport. **Child Ready Montana** is a State Partnership Regionalization of Care Grant (SPROC), funded by Health Resource and Services Administration (HRSA.) The **Child Ready Montana Program** recommends that hospitals train and certify their medical staff for pediatric cases and be stocked with pediatric equipment.

Rosebud Health Care Center in Forsyth, Montana was in need of a 'Broselow Bag System.' The Broselow Bag System supplies the hospital with all the information and equipment needed for pediatric emergency resuscitation requirements. "Taking care of pediatric patients always raises the tension for the caregiver. No caregiver likes to see an injured or sick pediatric patient. With the correct equipment available to provide care to these pediatric patients, this tension is somewhat relieved," said St. Vincent Healthcare Trauma Outreach Educator Chuck Bratsky. "The Broselow Bag is a bag of equipment that is designed to give care for a pediatric patient. This is a patient length based approach to care. By providing this equipment to outlying facilities, simplifies pediatric care."

On Tuesday, November 5th Rosebud Health Care Center received a Broselow Bag from **Child Ready Montana.** The hospital will now be able to better treat future pediatric cases in need of resuscitation.

"Caring for critical pediatric patients isn't something most EMS professionals do on a daily basis," explained Robin Suzor, of the DPHHS Emergency Medical Services for Children Program. "In reality, pediatric patients have different needs than adults. That's why we are working in partnership with Montana hospitals to ensure hospitals are Pediatric Ready. Congratulations to Forsyth for making sure children have the right care at the right time in the right place."

Roosevelt Medical Center in Culbertson, Montana is the next hospital that will receive a Broselow Bag. (Independent Press)

The Child Ready Montana Program will be conducting simulations at; Sidney, Glendive, Terry, Ekalaka, and Baker in December.

For more information contact: **Kassie Runsabove, SPROC Program Manager/Cultural Liaison at (406) 238-6216 or** kassie.runsabove@sclhs.net.

First Candle's Bedtime Basics for Babies!
A National Infant Safe Sleep Campaign

First Candle's: Bedtime Basics for Babies

First Candle has kicked off a National Infant Safe Sleep campaign called " **Bedtime Basics for Babies**." First Candle set a goal to reduce the number of sudden, unexpected infant deaths in the U.S. To reach this goal they want to ensure that every parent is aware of, and prepared to adopt, lifesaving in sleep practices before leaving the hospital. They also want to ensure that every baby has access to a safe crib, especially if the family can't afford one.

First Candle states more than 4,500 sudden unexpected infant deaths occur each year and statistics show that as many as 80-90% are the result of unsafe sleep practices. For more information about First Candle or to download fact sheets and brochures go to http://www.firstcandle.org.

For Montana's Sudden Infant Death Syndrome and Bed Sharing report, 2003-2010 go to http://www.dphhs.mt.gov/publichealth/cdrp/documents/SIDS.pdf

Infant brains are surprisingly sensitive to other people's movements, according to new research published in the open-access journal *PLOS ONE*, by Joni Saby and colleagues at Temple University and the University of Washington.

When adults see other humans making movements with specific body parts, the parts of their brains devoted to moving those body parts also become activated. While watching someone moving their hand, the part of your cortex devoted to moving your own hand also becomes active. There are various developmental and evolutionary theories as to why this might be the case, one of which being that it might be a neurobiological foundation of our ability to imitate others, which is necessary for cultural learning and language development. Until now, however, this phenomenon has only been observed in adults, and researchers chose to investigate whether the infant brain also shows this sensitivity.

In this study, the authors used non-invasive recordings over the scalp of infants to show that when they observed other people using their hands, activity in the hand areas of their cortex increased. Likewise, when infants observed other people moving their feet, activity in the foot areas of their cortex increased. This provides evidence that infant brains are tuned to the mere observation of other people's actions, which offers new clues toward our understanding of imitation and cultural learning.

Co-author Andrew Meltzoff expands, "**The neural system of babies directly connects them to other people, which jumpstarts imitation and social-emotional connectedness and bonding. Babies look at you and see themselves**."

APAPublic Library of Science. (2013, November 1). "Infant brains tuned to observation of other people's actions." *Medical News Today*. Retrieved fromhttp://www.medicalnewstoday.com/releases/268156.

International Safe Toys and Gifts Month

Safe Kids Worldwide is a global network of organizations whose mission is to prevent accidental childhood injury, a leading killer of children 14 and under. Safe Kids Worldwide was founded in 1987 as the National SAFE KIDS Campaign by Children's National Medical Center with support from Johnson & Johnson. Safe Kids Worldwide is a 501(c)(3) non-profit organization located in Washington, D.C.

Read more... International Safe Toys and Gifts Month

The results from the 2013 Pediatric Readiness Assessment regarding the Monitoring Equipment available for immediate use in the ED, shows that 100% of the 52 Hospitals that responded to the survey have a child blood pressure cuff; and 85% have a neonatal blood pressure cuff.

Pediatric Cliff Notes
Circulation

- BP is an unreliable indicator of shock in pediatric patients
- Pediatric patients can compensate for up to a 40-45% blood loss
- Low blood pressure related to losing blood or fluid is a late sign & may indicate a loss of 25% volume
- Cap refill is a good measure in kids
- Decreased circulation to the skin is an early sign of compensation for a circulatory problem in kids (not always true in adults)

The 4th Vital Sign: Blood Pressure

- Blood pressure in children behaves differently in children than in adults.
- Measurements will stay in the same range in the face of decreasing circulating volume for a long time.
- Acute intravascular losses of 20-25% will finally cause BP numbers that define hypotension.
- Other forms of fluid loss such as dehydration will cause hypotension at varying percentages based upon the clinical issue, age, etc. Range of these losses 5-15% before BP falls.
- Once hypotension has developed, cardiovascular collapse is a significant risk. This is called decompensated shock.

Measuring blood pressure in kids

Cuff size is critical.

Too small and blood pressure will be falsely elevated.

Too big and blood pressure will be falsely lowered.

If the bladder does not reach at least 2/3 the way around the limb, the numbers obtained are likely inaccurate.

Cuff length should cover 2/3 of the distance of the limb between joints.

Blood Pressure Sites

Forearms

Upper arms

Thighs

Calves

Any of the above are acceptable.

Leg BPs are normally the same as arm BPs until about age 1.

Leg pressures may be slightly higher after age 1.

Avoid sites proximal to IV insertion sites.

Avoid limbs that appear to be fractured or badly damaged.

If one site seems better tolerated by the child, use that.

Manual method - upper arms are easiest;

machine measurements - often easiest on calves or thighs.

Set upper limit for inflation pressure on machines to 100 for babies and 120 for kids. These are also good upper numbers to aim for in manually collected BPs.

Blood Pressure Parameters

Age	Systolic	Diastolic
Birth (12hr. <1000g)	39-59	16-36
Birth (12hr. 3kg wt)	50-70	25-45
Neonate (96 hr)	60-90	20-60
Infant (6 mo)	87-105	53-66
Toddler (2 yr)	95-105	53-66
School Age (7 yr)	97-112	57-71
Adolescent 15 yr +	112-128	66-80

Hazinski, M.F. 1992

Rule of Thumb: The diastolic number should be about 2/3 of the systolic number

UNDERAGE DRINKING SOARS AT NEW YEAR'S

The number of minors treated in hospital emergency rooms for drinking on New Year's Day is nearly four times the average daily figure, according to a federal study.

The study, published in the Journal of Consulting and Clinical Psychology, was based on data from the Drug Abuse Warning Network, which estimated that 1,980 emergency room visits on New Year's Day 2009 involved underage drinking, versus 546 such visits on an average day.

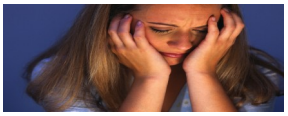
"This stunning increase in underage drinking-related emergency room visits on New Year's Day should be a wake-up call to parents, community leaders and all caring adults about the potential risks our young people face for alcohol-related accidents, injuries and death during this time of year," Substance Abuse and Mental Health Services Administration chief Pamela S. Hyde said in a statement.
http://www.cnn.com/2010/HEALTH/12/31/underage.drinking/cy's study.

SMOKING ALCOHOL - THE DANGEROUS WAY PEOPLE ARE GETTING DRUNK

A new form of drinking, known as “smoking” alcohol, has doctors concerned. Adolescents are particularly susceptible to this because it is novel and exciting.

An individual can pour alcohol over dry ice and inhale it directly or with a straw, or make a DIY vaporizing kit using bike pumps. The alcohol of choice is poured into a bottle, the bottle is corked, and the bicycle pump needle is poked through the top of the cork. Air is pumped into the bottle to vaporize the alcohol, and the user inhales.

When alcohol vapor is inhaled, it goes straight from the lungs to the brain and bloodstream, getting the individual drunk very quickly. Because the alcohol bypasses the stomach and liver, it isn’t metabolized, and the alcohol doesn’t lose any of its potency. Drinkers feel the effects instantly, but the risks are also much higher.



People who smoke their alcohol are at a much greater risk of getting alcohol poisoning and potentially overdosing. When people drink too much alcohol, they tend to vomit. Vomiting is one of the ways that prevents an alcohol overdose, but when alcohol circumvents the stomach and liver, the body can’t expel it. “It’s terrible for your lungs and nasal passages,” says Carise. “Your lungs are not meant to inhale something that can turn back into a liquid. When you think of liquid in the lungs, you think of drowning.”
Read more: Smoking Alcohol: The Dangerous Way People Are Getting Drunk | TIME.com http://healthland.time.com/2013/06/05/smoking-alcohol-the-dangerous-way-people-are-getting-drunk/#ixzz2I2Fhjt76

NATIONAL DRUNK AND DRUGGED DRIVING PREVENTION MONTH

NHTSA's primary message during the December holiday season is **Friends Don't Let Friends Drive Drunk--Designate a Sober Driver**.

But they also know that some States and communities will be increasing enforcement of impaired driving laws through sobriety checkpoints or saturation patrols, so they've provided multimedia tools to support the **You Drink & Drive. You Lose**. message.

http://www.cdc.gov/motorvehiclesafety/Impaired_Driving/index.html

Let the gift-giving start with yourself

Treat yourself to healthy boundaries, such as a schedule that includes plenty of time for nourishing food, rest and relaxation," says Dr. Mallay Occhiogrosso, a psychiatrist at New York-Presbyterian/Weill Cornell Medical Center. "Whether by taking 15 minutes to meditate or being gracious about relatives' inevitable differences, prioritize wellness and keep the focus on the things about the holiday that really matter."

They suggest that to keep your holiday stress to a minimum this year try the following advice:

- Seek out emotional support. If you have family difficulties, try to plan some time with friends. If you feel isolated, you may want to seek out the support of your community, religious or social services. If you feel lonely, you might consider volunteering your time at an organization you support.
- **Take** a 15-minute break. Fifteen minutes of "alone time" may be just what you need to refresh yourself. Try taking a brisk walk around the block. Exercise is a great stress reliever, and a daily dose of winter sunlight can dramatically improve your mood.
- **Prioritize** your time. Understand that you can't do everything, so choose the things that you can accomplish and enjoy. Get input from your family and friends about what it is they would really enjoy doing this holiday.
- **Shop** without anxiety. Remember that it's the thought that counts. Don't let competitiveness, guilt and perfectionism send you on too many shopping trips. Create a holiday shopping budget and stick to it, so the holiday bills don't linger after the tinsel is gone.

- **Ask** for help. Getting your family and friends involved in the holiday preparations may alleviate the stress of doing it all on your own.
- **Set** realistic expectations. Sometimes, expectations for family get-togethers are too high and result in disappointment and frustration. Accept your family members and friends as they are and set aside grievances for a more appropriate time.
- **Celebrate** the memories of loved ones no longer here. Holidays can also be stressful as we confront the memories of those who have died. This can be a normal part of the holiday experience and should be openly discussed and celebrated.
- **Plan** ahead. You will have more time to spend doing the things that you really want to do if you set aside specific days for shopping, cooking and visiting friends. You may also want to plan your menu in advance and make one big shopping trip.
- **Put** it all in perspective. Think about what the holiday really means to you and your family: time together, religious observance, reflection on your life and future goals - let these aspects of the holidays keep things in perspective.

Rates of anxiety and depression peak during the holidays; you don't have to suffer unnecessarily. These tips can help you to reduce stress and make the holidays a pleasure. **Doing less may help you to enjoy the season more, and that is really the best stress reliever of all.**

MLAHospital, NewYork-Presbyterian. "Make it a happy, healthy, and stress-free holiday season." *Medical News Today*. MediLexicon, Intl., 30 Oct. 2013. Web.18 Nov. 2013. <http://www.medicalnewstoday.com/

TRIVIA CONTEST:

First 3 to answer the questions wins a free Broselow tape and a sweet gift
Email rsuzor@mt.gov)

1. What percentage of EMS PreHospital services responded to the survey?
2. What is one way to reduce the amount of stress?
3. What is the "normal" blood pressure for an infant?

ANNOUNCING *PFA MOBILE™* FOR ANDROID!

Now available for Android devices, the app PFA Mobile™ can assist responders who provide Psychological First Aid (PFA) to adults, families, and children following disasters or emergencies. Adapted from the *Psychological First Aid Field Operations Guide (2nd Edition*),

PFA Mobile™ allows responders to review the 8 core PFA actions, match PFA interventions to specific stress reactions of survivors, hear mentor tips for applying PFA in the field, self-assess to determine readiness to conduct PFA, assess and track survivors' needs, collect data, and make referrals. PFA Mobile™ provides additional support in the field by providing tips on diverse survivor groups (infant/toddler, preschool, school-age, adolescent, adult), keeping track of survivor concerns and referral needs, and facilitating referrals via resource links. PFA Mobile™ supplements other resources that trained individuals utilize before, during, and after a disaster response. **NOTE:** PFA Mobile™ *does not replace* PFA training. To receive training, enroll in *PFA Online*, a free 6-hour interactive course. Free continuing education credits are available.

ACTIVE SHOOTER RESPONSE: THE RAPID TREATMENT MODEL

The Firefighters Support Foundation is a 501(c)(3)tax-exempt non-profit organization primarily dedicated to assisting firefighters and rescue personnel perform their jobs effectively and safely through free training.

Firefighters Support Foundation (FSF) has released its newest free video program. This 30-minute video program and accompanying 29-slide PowerPoint presentation compose an introduction to the third generation of active shooter response. Unlike previous approaches, the Rapid Treatment Model specifically integrates fire/EMS with the law enforcement response, and the focus is on getting aid to the wounded within the golden hour, even while law enforcement is still clearing the structure. It allows EMS personnel to work in a safe, secured zone simultaneously with law enforcement clearing, and it does not demand complicated cross-training between the agencies.

Unlike the now standard model of response teams followed by rescue teams, or high-training approaches like TEMS or TCCC, the Rapid Response Model allows EMS and police agencies to focus on what they already do best, and not try to make, for example, firefighters or paramedics into tactical personnel nor police officers into medical treatment experts. The conceptual foundation for the Rapid Response Model is that the shooter is usually dead or kills himself when law enforcement arrives on-scene. The main problem at most of these rapid mass murder scenes is getting aid to the wounded as fast as possible, without waiting for the "all clear," while keeping EMS personnel safe. The Rapid Treatment Model borrows two easily implemented concepts from the military--the Forward Operating Base and the Casualty Collection Point- to accomplish this goal.

For more information :http://www.usfa.fema.gov/fireservice/ops_tactics/disasters/

Montana EMS Emergency Care